



Professional Licensing Boards

# Georgia Construction Industry Licensing Board

*Division of Electrical Contractors*

Licensure Examinations

## *Candidate Information Bulletin*

**Examination Development and Testing Unit**

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*The Examination Development and Testing Unit gratefully acknowledges the assistance of other state licensing programs in the development of this candidate information bulletin. Portions of this bulletin were based on candidate information bulletins of other states.*

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## Introduction

The Division of Electrical Contractors of the Georgia Construction Licensing Industry Board was created by the Georgia legislature to protect the public by taking steps to ensure that licensed Electrical Contractors are competent in their profession. To achieve this goal, minimum standards and requirements were established by the Board for entry into the profession. Passing of a licensing examination is one of the requirements for obtaining an Electrical Contractors license.

Please review this bulletin carefully. It provides you with information you need about the Electrical Contractor examinations.

### 1. Getting to the Examination

An examination admission notice will be mailed to scheduled applicants two weeks prior to the examination. The notice will give the location, date, and time of the examination. We recommend that you locate the testing site and parking locations before the morning of the examination. Allow extra time on the morning of the examination to find parking and remember that most lots do charge a fee. Parking fees vary from location to location.

### 2. Veterans' Preference Points

Georgia law [General Provisions Volume 30, Title 43-1-9.(1)(2)(3)] provides that veterans meeting certain conditions are eligible for the addition of five to ten points to their examination scores. To qualify, veterans must have served for a minimum of one year in active duty status, and must have served during a period of conflict or war for a minimum of 90 days. The law provides that you may also qualify for veterans' preference points if you were discharged for injury or illness incurred in the line of duty and your disability is officially rated. To apply for veterans' preference points, if you have not already submitted a DD-214 form and documentation of your disability (if applicable), you may bring a copy of this information to the examination site and turn it in to the examination proctor. Please note that the copy will not be returned to you.

## At the Examination

### 3. What to Bring to the Examination

- A. **Admission notice** – contains time and location of examination and the classification of the examination you will be taking.
- B. **Identification** – must bear both your picture and your signature (e.g., driver's license). If you do not have such identification, you must bring a notarized photograph of yourself.
- C. **Pencils** – do not bring pens, pencils or other writing instruments to the examination. Pencils will be provided during check-in.
- D. **Calculator** – Your calculator must be a silent, non-printing, battery operated or self-powered type. It must not be programmable and should not be a device designed for the storage and retrieval of alphabetic data (such as an electronic organizer). It should not have a keypad that has all 26 letters. You may wish to bring spare batteries for your calculator.
- E. **References** – Only reference material listed on the Suggested Reference List will be allowed in the examination room.

**NOTE:** Candidates are not permitted to share references or equipment during the examination. All candidates must bring their own references and equipment. Reference material may be highlighted, or underlined. References may be tabbed/indexed with permanent tabs only; post-it flags are not acceptable. Reference books may not have hand written notes or additional loose papers. If any material is downloaded from the internet, it must be bound and placed in a binder.

#### 4. Special Accommodations for Candidates with Disabilities

The Georgia Construction Industry Licensing Board wants to ensure that all qualified individuals with a disability have the opportunity to take any of the licensing examinations.

Wheelchair access is available at all established test centers. Candidates are requested to advise the Board, in writing, at the time of application, that wheelchair access is necessary.

Qualified candidates with sensory, mental or physical disabilities that would prevent them from taking the examination under standard conditions may request special accommodations. Candidates should check the appropriate space on the "Examination Scheduling Form," and contact the Board office at the address below, to obtain the "Request for Disability Accommodation Guidelines." Application materials, including information requested in the "Guidelines," must be received by the Board by the application deadline and are available from:

Construction Industry Licensing Board  
Division of Electrical Contractors  
237 Coliseum Drive  
Macon, GA 31217-3858  
(478) 207-1416

#### 5. Visitors at the Examination Site

Visitors will not be permitted in the examination room. If you need to meet family members or other persons after the examination, you should arrange to meet in the lobby of the building in which the examination is given. Candidates will not be allowed to visit with, or exchange messages with others during the examination.

#### 6. Conduct During the Examination

Under Board rule 121-3-.02(2), you are expected to conduct yourself in a professional manner during the examination. Any candidate engaging in conduct that subverts or attempts to subvert the examination process may be dismissed from the examination, may have scores withheld and/or declared invalid, may be disqualified from the practice of the profession, or may be subject to other Board sanctions under Board rule 121-5.

- A. You may bring and use only the reference material designated on the Reference List in the examination room.
- B. You may not bring cameras, cell-phones, tape recorders, pagers, timers, personal digital assistants (PDAs), or electronic recording or transmitting devices into the examination room. **If you do bring one of these devices, you will have to leave it outside the testing room, unattended, and the state will not assume responsibility for it. IF YOU ARE FOUND IN THE TESTING ROOM WITH ONE OF THESE, YOU WILL BE DISMISSED FROM THE EXAMINATION.**
- C. You may not take notes from the examination room.
- D. You may not remove from the examination room any examination materials.
- E. You are not to reproduce or reconstruct any portion of the licensing examination or aid others in reproducing or reconstructing the same.
- F. The examination proctors cannot answer any questions about the content of any examination questions.
- G. You may not leave the examination room except with the examination proctor's permission. If you are permitted to leave, you may not use the time to refer to reference material. If you are permitted to leave and return, you will not be granted any extra time to complete your examination.
- H. Report to the examination room at the designated time. Seating of candidates, distribution of test materials and testing instructions will begin shortly thereafter. **ANYONE WHO ARRIVES AFTER TESTING BEGINS WILL NOT BE ADMITTED.**
- I. You may be dismissed from the examination room and/or may be denied a license for irregularities including, but not necessarily limited to:
  - 1. disrupting other candidates;
  - 2. attempting to copy answers from another candidate;
  - 3. allowing your answers to be copied;
  - 4. impersonating another examination candidate;
  - 5. failing to follow the examination proctor's instructions;
  - 6. trying to copy or remove examination materials;
  - 7. trying to use unauthorized references or materials.

## **7. Test-taking Skills**

- A. Read all instructions carefully, and be sure you understand them. Ask questions about any instructions that are unclear.
- B. Bring a watch to the examination to use in measuring your progress through the examination. Removing your watch and placing it in view on the table may save you time since a quick time check will not require major changes in body position or eye focus.
- C. Be sure to mark an answer for all questions, even the ones about which you may be unsure. There is no penalty for guessing, and your score is based upon the total number of questions you answer correctly.
- D. For each question, select the BEST answer of the options listed. More than one choice may be partially correct, but for each question there should be only one best answer.
- E. Be sure to mark your answers on the answer sheet provided. No credit will be given for any work done in your examination booklet or answers marked in your booklet.
- F. Scratch paper will not be needed. You may perform any computations or make notes in the examination booklet.
- G. Do not make stray marks on your answer sheet. You may wish to make a note in your examination booklet next to any questions you wish to review before you turn in your examination.

## **8. Smoking Policy**

Smoking is not allowed in the examination room or connecting restrooms.

## **9. Dressing for the Examination**

Dress comfortably. Individuals have different temperature preferences and it is not possible for us to please everyone. We often have little control over the heating and air-conditioning in the locations we use for examinations. We recommend that you bring a sweater or jacket so that you can be comfortable in different conditions.

## **10. Description of the Examinations**

Two Electrical Contractors licensure examinations are offered to correspond with the two classes of Electrical Contractors licenses – Class I (Restricted) and Class II (Unrestricted). Both examinations consist of multiple-choice questions. Please refer to the information on the following pages for the number of questions on each examination and the content categories.

## Content Categories for Class I (Restricted) and Class II (Unrestricted) Electrical Contractors

	<u>Number of questions</u>	
	<u>Class I</u>	<u>Class II</u>
<b>1. Regulations, Laws, and Administrative Functions</b>	<b>30</b>	<b>30</b>
A. <i>Comply with Laws</i>	10	10
1. Workers' compensation		
2. Unemployment insurance		
3. Employer's tax guide (circular E)		
4. Georgia Construction Industry Licensing Board		
5. State sales and use tax		
6. Business license		
B. <i>Comply with Regulations</i>	9	9
1. Code of Federal Regulations, Title 29, Part 1926 (OSHA)		
2. National Electrical Code (NEC)		
3. National Fire Protection Association (NFPA)		
4. Underwriter's Laboratories (UL) or other National Testing Laboratory (NTL) certification		
5. Obtain necessary electrical permits and inspections		
C. <i>Comply with Administrative Requirements</i>	6	6
1. Bonding and liquidated damages		
2. Insurance: liability, property damage, auto, etc.		
3. Financing and cash flow		
4. Bookkeeping and accounting		
5. Complete an accident or incident report		
6. Job cost estimating and bidding procedures		
7. Contracts and purchase orders		
D. <i>Plan and Organize Work</i>	5	5
1. Interpret drawings and specifications for submittal process		
2. Inventory equipment, materials, and supplies		
3. Scheduling and project management		
<b>2. Technical Functions</b>	<b>110</b>	<b>110</b>
A. <i>Maintain Basic Electrical Circuits</i>	21	14
1. Check and/or replace grounding systems and ground fault indicators		
2. Check overloaded and/or shorted circuits		
3. Connect batteries (in parallel and/or series)		
4. Connect simple circuits using schematic diagrams (parallel and series)		
5. Check wire terminations		
6. Make splices and repairs		
7. Check and/or replace meters and other wiring devices		
B. <i>Install and Maintain the following Electrical Controls and Devices</i>	22	15
1. Control relay system		
2. Drum switches for motor control		
3. Magnetic and reduced voltage starter		
*4. Operational amplifier		
5. Overload relays in starting control circuit		
6. Pressure switches, temperature switches, and instrument transmitters		
7. Rheostat/potentiometer		

\* Class II Only

		<u>Number of questions</u>	
		<u>Class I</u>	<u>Class II</u>
<ul style="list-style-type: none"> <li>*8. Solid state 3-phase rectifier</li> <li>9. Temperature operated pilot device</li> <li>10. Time delay relay</li> <li>11. Limit switch</li> <li>12. Selector, push button, HOA switches</li> <li>13. Surge protectors</li> <li>14. Voltage regulator</li> <li>15. Programmable controller</li> <li>16. Panels, circuit breakers, and disconnects</li> <li>17. Draw schematic diagrams from prewired circuits</li> <li>18. Motion detectors (e.g., infrared, lighting controls, EMS)</li> </ul>			
C. <i>Install and Maintain D-C and A-C Rotating Equipment</i>		9	16
<ul style="list-style-type: none"> <li>1. Change direction of rotation of electrical motor</li> <li>2. Change speed of single-phase motor</li> <li>3. Connect single-phase A-C motor to run on different voltages</li> <li>*4. Connect 3-phase A-C motor to run on different voltages</li> <li>*5. Connect 3-phase motor stator for delta operation</li> <li>*6. Connect 3-phase motor stator for star operation</li> <li>7. Replace capacitor run/start motor</li> <li>*8. Install/Replace D-C compound motor</li> <li>*9. Install/Replace D-C generator</li> <li>*10. Install/Replace shunt motor</li> <li>*11. Install/Replace repulsion-induction motor</li> <li>*12. Install/Replace series motor</li> <li>*13. Install/Replace shaded-pole motor</li> <li>*14. Install/Replace split-phase motor</li> <li>*15. Install/Replace synchronous motor</li> <li>*16. Install/Replace 3-phase induction motor</li> <li>*17. Install/Replace wound rotor motor</li> <li>18. Calculate motor loads and overload protection</li> <li>*19. Install fire pump system (NFPA 20)</li> <li>20. Interpret motor name plate data</li> <li>21. Draw diagrams of electrical motor and control circuits</li> <li>22. Size and install motor short circuit protection</li> <li>23. Size and install branch circuit wiring for motors</li> </ul>			
D. <i>Install, Size, and Maintain Transformers</i>		7	21
<ul style="list-style-type: none"> <li>*1. Check transformer oil for contaminants</li> <li>*2. Clean power transformer</li> <li>*3. Connect a dual voltage transformer for its highest input and output</li> <li>*4. Connect a dual voltage transformer for the low voltage input and output</li> <li>*5. Connect an amp meter to a high voltage line using a current transformer</li> <li>*6. Connect a volt meter to a power line through the use of a potential transformer</li> <li>7. Connect an auto-transformer to give a variety of voltages</li> <li>8. Connect power-supply distribution transformer to supply 115 and 230 volts</li> <li>*9. Connect power-supply distribution transformer to supply 3-phase power, 4-wire connection</li> </ul>			

\* Class II Only



**Number of questions**  
**Class I**      **Class II**

*10. Connect power supply distribution transformer to supply 3-phase power, delta configuration		
*11. Connect power supply distribution transformer to supply 3-phase power, Y configuration		
*12. Connect the secondary of a 3-phase bank to give a 4-wire delta system		
*13. Connect the secondary of a 3-phase bank to give a 4-wire star configuration		
14. Connect a single-phase transformer to give a higher output voltage		
15. Connect a single-phase transformer to give a lower output voltage		
*16. Connect three single-phase transformers to form a delta-delta configuration		
*17. Connect three single-phase transformers to form a delta-star configuration		
*18. Connect three single-phase transformers to form a star-delta 3-phase bank		
*19. Connect three single-phase transformers to form a star-star 3-phase bank		
*20. Connect two single-phase transformers in an open-delta configuration		
*21. Connect two single-phase transformers in parallel		
22. Test transformer for output and performance under load		
23. Recognize harmonic problems in electrical systems		
E. <i>Install and Maintain Interior Electrical Systems</i>	30	23
1. Check emergency lighting system		
2. Correct the power factor on a system		
3. Install bundled cables		
4. Install busway duct		
5. Install circuit breakers in panel boards		
6. Install circuits using non-metallic sheathed cable		
7. Install and connect system grounds		
8. Install distribution panel boards		
9. Install electrical metallic tubing		
10. Install electrical appliances (water heater, A/C, etc.)		
11. Install fluorescent lighting fixture		
12. Install incandescent lighting fixture		
13. Install lay-in busway work		
14. Install liquid-tight flexible metal conduit		
15. Install multi-conductor cable		
16. Install multi-conduit layout		
17. Install multi-control lighting circuit		
18. Install non-liquid tight flexible metal conduit		
19. Install pipe sleeves in concrete beam form		
20. Install plastic conduit		
21. Install plug-in busway work		
22. Install power feeder wiring system to machinery		
23. Install rigid conduit		
24. Install a service entrance head to a service drop		
25. Install under-floor duct work		
26. Install underground service entrance		
27. Install wire in conduit and terminate		
28. Install isolated grounding systems		
29. Install service entrance grounding system		
30. Install Intermediate Metal Conduit (IMC)		
31. Install Electrical Non-metallic Tubing (ENT)		
32. Install Service Entrance cable (SE)		
33. Install underground cable (UF)		

\* Class II Only

	<b><u>Number of questions</u></b>	
	<b><u>Class I</u></b>	<b><u>Class II</u></b>
34. Calculate lighting levels		
35. Calculate load levels		
36. Select circuit protective devices		
37. Install temporary services		
38. Install service entrance cable round (SER)		
39. Install building grounding system		
40. Size and install junction boxes and conduit		
<i>F. Special Equipment, Conditions, and Locations</i>	21	21
1. Install health care facility electrical systems		
2. Install electrical systems for swimming pools, hot tubs, hydromassage tubs, etc.		
3. Install welding machines		
4. Install gas station electrical systems		
5. Install explosion proof devices in hazardous locations		
6. Install data processing equipment		
7. Install lighting dimmer system		
8. Install communication systems (public address, etc.)		
9. Install UPS and standby systems		
*10. Install elevator electrical service		
11. Install electric signs		
12. Install mobile home electrical systems		
*13. Install over 600 volt electrical systems		
14. Install low voltage systems		
<b>Total Number of Test Questions</b>	<b>140</b>	<b>140</b>
<b>Additional Pre-test Questions Per Examination</b>	<b><u>15</u></b>	<b><u>22</u></b>
<b>Total Number of Test and Pre-test Questions</b>	<b>155</b>	<b>162</b>

\* Class II Only

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## 11. Time Limits

You will have a total of eight (8) hours to complete both parts of the Electrical Contractors (Class I – Restricted and Class II – Unrestricted) licensure examinations. The examinations are administered in two parts. You will have four (4) hours to complete Part 1, followed by a break. You will also have four (4) hours to complete Part 2. This limit includes time for the 15 pre-test questions on the Class I examination and 22 pre-test questions on the Class II examination.

## 12. Pre-testing

The total number of questions on the examinations will include pre-testing of new test questions. The number of questions used to compute your score is shown on page 7 (total number of test questions). The pre-test questions will not be used to compute your score, but will allow for the collection of statistical information on the questions. Pre-test questions will be either rewritten or included on future examinations based on the statistical information collected.

## 13. Question Comments

There will be space provided on the back of the answer sheet (a sample is provided at the end of this bulletin) for you to comment on the examination's content or on any of the individual questions. When commenting on a question, please be as specific as possible and provide supporting arguments. If you believe that a question is unclear, explain why this is so. Your comments will be used in determining which questions on the examination will be reviewed prior to grading.

# After the Examination

## 14. Statistical Review of Examination Performance

After administration of the Electrical Contractors examinations, a statistical analysis of the examination and of each question is conducted. Based on the statistics and the candidates' comments, questions that might be flawed will be reviewed by the Division. After review of the questions on the examinations, the examinations are scored.

## 15. Difficulty Rating

The examination is developed in a manner to ensure consistency in evaluating the candidates' competency in the profession. Individual questions used on the examination are developed using a panel of licensed contractors. As each question is approved, it is assigned a difficulty rating by the panel. The difficulty rating of each question is used to determine the passing point of the examination form. In this manner, passing an examination form with more difficult questions will require a smaller number of correct answers, while passing an examination form with less difficult questions will require a larger number of correct answers. This process of determining the passing score is referred to as the modified Angoff method.

A new examination form is created for each examination administration. When a new examination is created, it is not possible to select questions with exactly the same difficulty level as all previous examinations. Accordingly, requiring candidates to answer correctly the same number of questions in order to pass different examination forms would be unfair.

Therefore, the number of answers required to pass any given examination form will vary from one form to another, based on the difficulty of the questions. If the questions selected for one examination form are more difficult, fewer questions are required to be answered correctly to pass that examination form. For example, a candidate may be required to answer 68% of the questions correctly to pass a more difficult examination form. To pass a less difficult examination form, correct answers for 72% of the questions may be required.

## 16. Final Scaled Scores

To record and report scores for examination forms with different passing points in a consistent manner, the minimum passing score for each examination form is converted to a final scaled score of 70. In this manner, the minimum passing score is 70 for all examination forms, regardless of the difficulty level of the individual examination form.

In the example above, candidates who correctly answer 68% of the questions on the more difficult examination would receive a final scaled score of 70. Candidates who answer more questions correctly would receive a final scaled score proportionately higher than 70. Candidates who answer fewer questions correctly would receive a final scaled score proportionately lower than 70.

The final scaled score of 70 is required for passing any examination form. By scaling the scores based on a common passing score of 70, a candidate's performance from one examination form to another is directly comparable, the relative performance of examination forms administered from one time period to another can be evaluated, and the processing of candidate scores is fairer because the difficulty level of the individual examination forms has been controlled.

## 17. Score Reports

Approximately six (6) weeks after the examination, score reports will be mailed. Examination scores cannot be released over the telephone, so please do not call the Board Office for this purpose. Passing candidates will receive their examination score, while failing candidates will receive their examination score and subscores in the major examination content areas. Subscores will be provided for the examination major content areas listed in this bulletin (see page 4).

## 18. Examination Regrade Process

Your scores are checked many times to ensure the accuracy of your test results. The optical scanner used in scoring your test is extremely accurate, and scores close to 70 are routinely handscored. Experience has shown that it is extremely unlikely that any scoring errors will occur.

However, you may request a handscoring of your answer sheet. In the unlikely event that your score changes, the new score from the handscoring will replace your previous score, whether the score increases or decreases. You must send your request in writing, within thirty (30) days of the postmark of your examination results notice to the address given below. Please indicate the date on which you took the examination and the title of the examination you wish to be handscored. You will receive notification of the handscoring results within thirty (30) days of receipt of the request. Results of the handscoring will be final. Requests for handscoring should be sent to:

**Applied Measurement Professionals, Inc.**  
8310 Nieman Road  
Lenexa, KS 66214-1579

## 19. Licenses

The Board Office will mail passing candidates their licenses approximately six (6) weeks after the examination date. Any questions regarding licensing should be directed to the Board Office at 237 Coliseum Drive, Macon, GA 31217-3858, (478) 207-1416.

## 20. Re-examination Procedure

Candidates failing the examination must retake and pass the examination in order to become licensed. A new scheduling form will be sent with the score report to failing candidates. Board rule 121-2-.05 states that "Any applicant for licensure who takes and fails the examination twice after July 1, 1989, must present satisfactory evidence to the appropriate division of the Board that the applicant has completed a Board approved review course before such applicant will be admitted to a third examination. If such applicant fails the examination a third time, the applicant shall not be required to complete additional courses prior to taking subsequent examinations." Questions about examination scheduling may be directed to Applied Measurement Professionals, Inc., Candidate Services Department at 1-800-345-6559. A current scheduling form may be obtained from the Board Office or from the Board's website at [www.sos.state.ga.us](http://www.sos.state.ga.us).

## 21. Sample Questions

The following questions are intended to help you become familiar with some of the types of questions you may encounter on the examinations. These sample questions do not represent the full range of content or difficulty levels contained in the actual examinations.

1. A licensed electrical contractor can qualify
  - A. 2 or more companies.
  - B. only 1 company per county.
  - \*C. only 1 company at any given time.
  - D. as many companies as the contractor registers.
  
2. When used as a main building disconnect, a switch must be rated for
  - A. 200 ampere fuses.
  - B. 600 volt service.
  - \*C. service entrance equipment.
  - D. NEMA-12 installer.
  
3. What is the current draw of a 230 volt quick recovery residential water heater that has two 3000 watt elements?
  - \*A. 13 amperes
  - B. 18 amperes
  - C. 26 amperes
  - D. 30 amperes

\* **Correct Answer**

## 22. Sample Answer Sheet

A sample answer sheet is included at the end of this bulletin.

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APPLIED MEASUREMENT  
PROFESSIONALS, INC.

## ANSWER SHEET

### Directions for Marking the Answer Sheet

- Use a No. 2 lead pencil. Do **NOT** use ink or ball point pen.
- Make dark marks that completely fill the circle.
- Make **NO** stray marks on the answer sheet.

**A NAME** (Please print clearly.)

Last Name

First Name

Middle Initial

**B FIRST 4  
LETTERS  
OF LAST  
NAME**

**C APPLICANT  
ID NUMBER**

**D BIRTHDAY**

**MONTH**

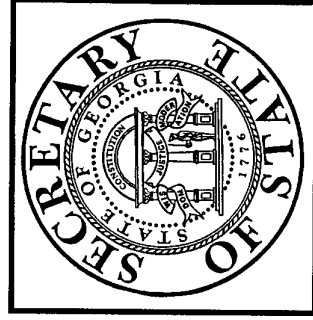
**DAY**

**E HAVE YOU EVER  
TAKEN THIS  
EXAM BEFORE?**

Yes No

**F TEST FORM  
NUMBER**

**G TEST  
CENTER  
NUMBER**



TEST BOOKLET  
NUMBER

1	(A)	(B)	(C)	(D)	41	(A)	(B)	(C)	(D)	81	(A)	(B)	(C)	(D)	121	(A)	(B)	(C)	(D)	161	(A)	(B)	(C)	(D)
2	(A)	(B)	(C)	(D)	42	(A)	(B)	(C)	(D)	82	(A)	(B)	(C)	(D)	122	(A)	(B)	(C)	(D)	162	(A)	(B)	(C)	(D)
3	(A)	(B)	(C)	(D)	43	(A)	(B)	(C)	(D)	83	(A)	(B)	(C)	(D)	123	(A)	(B)	(C)	(D)	163	(A)	(B)	(C)	(D)
4	(A)	(B)	(C)	(D)	44	(A)	(B)	(C)	(D)	84	(A)	(B)	(C)	(D)	124	(A)	(B)	(C)	(D)	164	(A)	(B)	(C)	(D)
5	(A)	(B)	(C)	(D)	45	(A)	(B)	(C)	(D)	85	(A)	(B)	(C)	(D)	125	(A)	(B)	(C)	(D)	165	(A)	(B)	(C)	(D)
6	(A)	(B)	(C)	(D)	46	(A)	(B)	(C)	(D)	86	(A)	(B)	(C)	(D)	126	(A)	(B)	(C)	(D)	166	(A)	(B)	(C)	(D)
7	(A)	(B)	(C)	(D)	47	(A)	(B)	(C)	(D)	87	(A)	(B)	(C)	(D)	127	(A)	(B)	(C)	(D)	167	(A)	(B)	(C)	(D)
8	(A)	(B)	(C)	(D)	48	(A)	(B)	(C)	(D)	88	(A)	(B)	(C)	(D)	128	(A)	(B)	(C)	(D)	168	(A)	(B)	(C)	(D)
9	(A)	(B)	(C)	(D)	49	(A)	(B)	(C)	(D)	89	(A)	(B)	(C)	(D)	129	(A)	(B)	(C)	(D)	169	(A)	(B)	(C)	(D)
10	(A)	(B)	(C)	(D)	50	(A)	(B)	(C)	(D)	90	(A)	(B)	(C)	(D)	130	(A)	(B)	(C)	(D)	170	(A)	(B)	(C)	(D)
11	(A)	(B)	(C)	(D)	51	(A)	(B)	(C)	(D)	91	(A)	(B)	(C)	(D)	131	(A)	(B)	(C)	(D)	171	(A)	(B)	(C)	(D)
12	(A)	(B)	(C)	(D)	52	(A)	(B)	(C)	(D)	92	(A)	(B)	(C)	(D)	132	(A)	(B)	(C)	(D)	172	(A)	(B)	(C)	(D)
13	(A)	(B)	(C)	(D)	53	(A)	(B)	(C)	(D)	93	(A)	(B)	(C)	(D)	133	(A)	(B)	(C)	(D)	173	(A)	(B)	(C)	(D)
14	(A)	(B)	(C)	(D)	54	(A)	(B)	(C)	(D)	94	(A)	(B)	(C)	(D)	134	(A)	(B)	(C)	(D)	174	(A)	(B)	(C)	(D)
15	(A)	(B)	(C)	(D)	55	(A)	(B)	(C)	(D)	95	(A)	(B)	(C)	(D)	135	(A)	(B)	(C)	(D)	175	(A)	(B)	(C)	(D)
16	(A)	(B)	(C)	(D)	56	(A)	(B)	(C)	(D)	96	(A)	(B)	(C)	(D)	136	(A)	(B)	(C)	(D)	176	(A)	(B)	(C)	(D)
17	(A)	(B)	(C)	(D)	57	(A)	(B)	(C)	(D)	97	(A)	(B)	(C)	(D)	137	(A)	(B)	(C)	(D)	177	(A)	(B)	(C)	(D)
18	(A)	(B)	(C)	(D)	58	(A)	(B)	(C)	(D)	98	(A)	(B)	(C)	(D)	138	(A)	(B)	(C)	(D)	178	(A)	(B)	(C)	(D)
19	(A)	(B)	(C)	(D)	59	(A)	(B)	(C)	(D)	99	(A)	(B)	(C)	(D)	139	(A)	(B)	(C)	(D)	179	(A)	(B)	(C)	(D)
20	(A)	(B)	(C)	(D)	60	(A)	(B)	(C)	(D)	100	(A)	(B)	(C)	(D)	140	(A)	(B)	(C)	(D)	180	(A)	(B)	(C)	(D)
21	(A)	(B)	(C)	(D)	61	(A)	(B)	(C)	(D)	101	(A)	(B)	(C)	(D)	141	(A)	(B)	(C)	(D)	181	(A)	(B)	(C)	(D)
22	(A)	(B)	(C)	(D)	62	(A)	(B)	(C)	(D)	102	(A)	(B)	(C)	(D)	142	(A)	(B)	(C)	(D)	182	(A)	(B)	(C)	(D)
23	(A)	(B)	(C)	(D)	63	(A)	(B)	(C)	(D)	103	(A)	(B)	(C)	(D)	143	(A)	(B)	(C)	(D)	183	(A)	(B)	(C)	(D)
24	(A)	(B)	(C)	(D)	64	(A)	(B)	(C)	(D)	104	(A)	(B)	(C)	(D)	144	(A)	(B)	(C)	(D)	184	(A)	(B)	(C)	(D)
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33	(A)	(B)	(C)	(D)	73	(A)	(B)	(C)	(D)	113	(A)	(B)	(C)	(D)	153	(A)	(B)	(C)	(D)	193	(A)	(B)	(C)	(D)
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39	(A)	(B)	(C)	(D)	79	(A)	(B)	(C)	(D)	119	(A)	(B)	(C)	(D)	159	(A)	(B)	(C)	(D)	199	(A)	(B)	(C)	(D)
40	(A)	(B)	(C)	(D)	80	(A)	(B)	(C)	(D)	120	(A)	(B)	(C)	(D)	160	(A)	(B)	(C)	(D)	200	(A)	(B)	(C)	(D)

CANDIDATE COMMENT FORM

**ITEMS.** If you believe a test question is flawed, fill in the appropriate item number below and describe your concern in the large boxes. Please indicate the question number and state as clearly and briefly as possible your comments, using a separate box for each question. Be sure that you have blackened the bubble to the right of the item number of any question for which you write a comment below. Your comments will be reviewed, but individual replies will **not** be made.

**TESTING CONDITIONS.** Questions on testing conditions are included in the test booklet. Please indicate your response to each of the questions (A through N) below by **blackening Y for Yes, or N for No.**

ITEMS												
1	<input type="radio"/> 43	<input type="radio"/> 85	<input type="radio"/> 127	<input type="radio"/> 152	<input type="radio"/> 177							
2	<input type="radio"/> 44	<input type="radio"/> 86	<input type="radio"/> 128	<input type="radio"/> 153	<input type="radio"/> 178							
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11	<input type="radio"/> 53	<input type="radio"/> 95	<input type="radio"/> 137	<input type="radio"/> 162	<input type="radio"/> 187							
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TESTING CONDITIONS												
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B	<input type="radio"/> Y	<input type="radio"/> N										
C	<input type="radio"/> Y	<input type="radio"/> N										
D	<input type="radio"/> Y	<input type="radio"/> N										
E	<input type="radio"/> Y	<input type="radio"/> N										
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M	<input type="radio"/> Y	<input type="radio"/> N										
N	<input type="radio"/> Y	<input type="radio"/> N										

<b>Question #</b> _____	<b>Question #</b> _____
<b>Question #</b> _____	<b>Question #</b> _____
<b>Question #</b> _____	<b>Question #</b> _____
<b>Question #</b> _____	<b>Question #</b> _____